## QUARTERLY RETROSPECT OF SURGERY.

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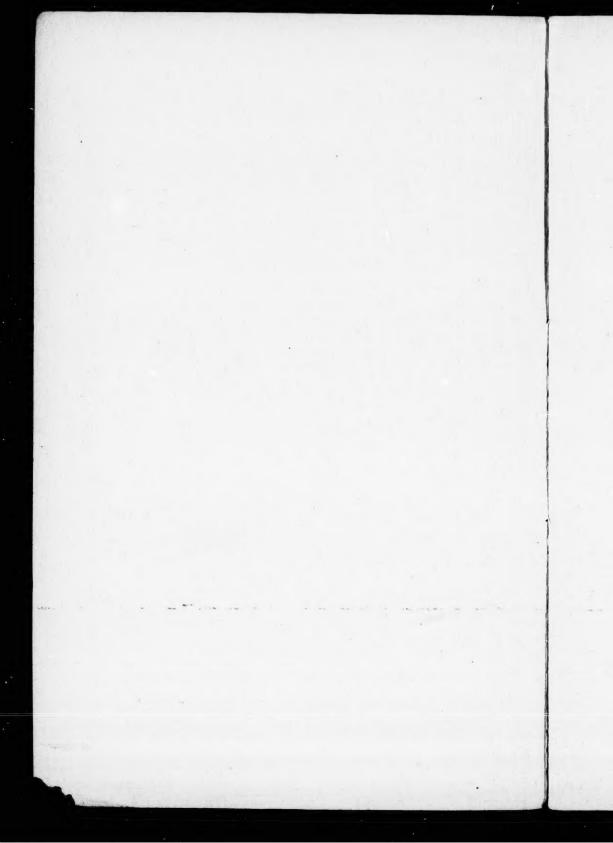
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Excision of Knee Joint .- Mr. Richard Davy, F.R.C.S., of the Westminster Hospital, London, has lately advocated (Brit. Med. Jour., October 20th, 1883,) a new method of resection of the knee joint, which he calls Tibio-femoral Impaction. The method consists in removing the end of the femur so as to leave it wedge shape, the wedge sloping from before, downwards and forward, a mortise is then cut in the head of the tibia and into this is pushed the tenon-shaped end of the femur. The leg is placed in a splint specially designed by Mr. Davy, and pressure is kept up on the foot until "impaction results in fixity of tenure." Mr. Davy claims that the advantages of his operation are, "that osseous ankylosis is established (so to speak) before the patient leaves the operating table and many surgical contentions are removed, such as the misplacement of bones by startings, jerks, or inefficient bandging." Mr. Davy admits that considerable shortening results from this procedure, but he does not think this an objection. Like many of Mr. Davy's operative novelties, we fear this new method of excision will not be enthusiastically adopted by the surgical world, the operation is certainly a new one and should be placed under the head of mechanical surgery. Mr. Davy has performed excision now

twenty-one times, in every case without special antiseptic precautions. He has never lost a case and has only been compelled to amputate once. Dr. Fenwick, Prof. of Surgery in McGill University, has lately published a work on excision of the knee joint, in which he reports twenty-eight cases of excision with one death (this occurred before the introduction of antiseptic surgery), and two where amputation had to be afterwards performed. Dr. Fenwick's method of operation, which is original with him, is to round off the end of the femur by removing a thin slice with a Butcher's saw, and then sawing out a concavity in the head of the tibia, fits the convexity of the femur into it. By this means osseous ankylosis is secured, and also early fixity of the parts, thus he accomplishes in a much more conservative way, and without the sacrifice of the epiphysal ends of the bones, all that Mr. Davy claims for his wedge and mortise operation. Dr. Fenwick perform all his excisions with the strictest Listerian precautions. His results have been good, as I can testify, many of the cases recovering with less than one inch of shortening, and the majority with less than two inches, besides the growth of the limbs is not interfered with, as Dr. Fenwick proves by reports of cases of excision performed on children whose limbs were measured several years after the operation. The splint used after the operation is that of Dr. P. Heron Watson, of Edinburgh.

'White Swelling,' Treated by Scott's Dressing.—Dr. Perrier (Thèse de Paris, 1882,) says that this method of treatment has fallen into unmerited oblivion. M. Suchard recalled attention to Scott's dressing in 1879 and trials were made at the Children's Hospital which gave important results. M. Suchard's method is to first cleanse the skin by rubbing it with a sponge or coarse cloth steeped in camphorated spirit; afterwards to cover the whole region with a piece of lint spread with a thick layer of the ointment, composed of equal parts of camphorated unguentum Hydrargyri and soap cerate. This is kept in position by straps of sticking plaster, and over these straps he places valves of flexible leather spread with soap cerate, this extends above and below the other dressing; a linen bandage is placed

over all. The dressing is removed every two or three weeks. Dr. Cazin, chief physician of the Hospital at Berck-sur-Mer, has also modified the preceding apparatus. He replaces the mercurial ointment with vaseline and covers it with cotton wool, over this he applies the strapping of sticking plaster and then another layer of cotton wool is put on and this is covered with a silicated bandage, when this apparatus is applied the children are allowed to play about the hospital and beach. The dressing is renewed every fortnight. Sometimes the application causes intense erythema which is removed by washing and powdering the skin and wrapping it in a linen bandage for two or three days.—(London Medical Record, Nov. 15, 1883.)

On the Immediate Treatment of Fractures by plaster-of-Paris.—At the recent meeting of the British Medical Association held in Liverpool, Messrs. Christopher Heath and John Croft read papers on the above method of treating fractures. (British Med. Jour., September 22nd, 1883.) Mr. Heath's paper pointed out that many other fractures besides those of the leg might be satisfactorily and easily treated by plaster-of-Paris bandages or splints, such for instance as fractured thighs in children, Pott's fracture, fractures of the humerus, clavicle, &c. Mr. Heath thinks that unless the fracture be near a joint, the joint should not be included in the plaster, and that to enclose joints unnecessarily with plaster-of-Paris, is to provide cases for the bone setter, so he never includes the knee or hip joints in any ordinary case of fractured shaft of the tibia or Fractures of the forearm are the only ones which Mr. Heath thinks unsuited for this method of treatment for the obvious reason that there would be great danger of drawing the bones together. Fractures of the olecranon he treats by flexing the arm to a right angle and allowing the patient to wear it in a sling. Mr. John Croft reported that he had treated over nine hundred cases of fractures of various bones by the immediate application of the plaster-of-paris splints with the best results. Each splint is constructed of two layers of flannel, the outer layer carries the plaster and the inner layer protects the skin. The splints are kept in place by muslin bandages.

The flannel or old blanket for the splint should be cut to the shape of limb; for instance, in applying a leg splint measure circumference at knee, calf, above the ankle, from the front of the ankle just round the heel to the front again, and at the middle of the metatarsus. Then cut the flannel half an inch less in breadth than half the circumference at those points. The four pieces of flannel then make two splints; the outside pieces are soaked in plaster of the consistence of thin cream and then laid on their respective inside pieces, whilst traction is kept up and the ends of the broken bones are maintained in apposition the splints are to be applied and smoothed and then the muslin bandage put on. Traction is to be maintained during the hardening of the plaster; this takes place in about three The bandage should not be too tight and should be evenly applied. The splints should not meet by half an inch down the front or back, as the swelling subsides the splints should be tightened by means of the bandages, and at the end of ten days if the patient be convalescing the outside bandage may be gummed, and at the end of a fortnight or three weeks the patient may leave for his own home.

In the discussion which followed the reading of these papers Dr. Gay, of Boston, U.S., said that this method of treating fractures had been in use in the Boston City Hospital for some years with very satisfactory results. Gauze was used instead of flannel and the limb was first wrapped in cotton wadding. The gauze was dipped in the plaster and applied to the limb and secured with an ordinary bandage. The layer of gauze did not meet in front by about an inch and the case could be sprung open at any time, removed and re-applied.

Dr. McColl (Michigan) used the plaster bandages with excellent results. He applied the plaster as soon after the fracture as possible, and enveloped the limb first in cotton wadding or flannel, making extension for 10 to 15 minutes, whilst the plaster was hardening. He allowed his patient up on crutches as soon as possible and did not remove the bandage for three or four weeks.

The immediate application of the plaster splint has not been

the rule here in Montreal, but in the cases I have seen this method practised, the result has been good. I had one case this summer of a bar-tender who broke his leg and soon exhibited signs of delirium tremens. The leg could not be kept in splint, so plaster-of-Paris was applied. The delirium lasted for some time and the man was tossing about continually, and sometimes threw himself out of bed. At the end of a month the plaster was taken off and the result was perfect, no deformity or shortening.

Diagnosis of Fracture of the Neck of the Femur.—Prof. Bezzi, after showing in the Spallanzoni the difficulties and uncertainties which often attend the diagnosis of this accident, observes that at the Milan Hospital a traditional practice exists of exploring (whenever fracture of the neck of the femur is suspected), the short space between the trochanter and crest of the ilium. In place of considerable resistance which is then produced in the sound limb through the tension of the tensor fasciæ latæ, there is found, when injury has occurred, a deep depression, due evidently to the diminution of the tension of this muscle owing to the approximation of its points of attachment. (Presse Med. Belge, July, 1883, quoted in London Practitioner, Nov., 1883.)

Treatment of Fracture of the Patella.—The surgical world has lately been much interested in the discussion which has taken place at the London Medical and Clinical Societies consequent on the reading of an address by Prof. Lister before the Medical Society on the Treatment of Fracture of the Patella by Incision and tying of the fragments together. The proper mode of treatment of this troublesome fracture has always been a serious question with surgeons, and very various are the means recommended to obtain union of the separated fragments. Some think the quadriceps muscle is altogether to blame for the separation of the fragments, and so treat the fracture by methods calculated to pull down the upper fragment; others say that separation is due to effusion of blood and serum, and advocate the withdrawal of this by aspiration. Others, as Prof. Hamilton of New York, say that bony union is not to be desired, as it can rarely be com-

plete, and leaves a weak bone, so they endeavor to get as close a fibrous union as possible by the application of bandages and splints.

Prof. Lister (Lancet, Nov. 3, 1883), in his address, relates seven cases of recent and old fractures of the patella treated by incision, and wiring together of the fragments. In all the cases, good bony union and free movement of the joint was the result. He strongly advocates this method of treatment, as the one best calculated to give the patient a useful limb. Six of these cases were shown to the Society, and in all the patella was perfectly natural in appearance and moved freely. Prof. Lister, as early as 1873, treated successfully ununited fracture of the olecranon process of the ulna by wiring the fragments together, and in 1877 first treated fracture of the patella in the same way. He first exposes the separated fragments by a longitudinal incision two inches long, then with a common brad-awl perforates each fragment obliquely, so as to bring out the holes upon the broken surface a little distance from the cartilage. Stout silver wire is then passed through the holes, and the fragments are brought accurately into position. Before he brings them together. he provides for the drainage of the joint. A pair of dressing forceps, with the blades closed, are passed through the wound to the most dependent part of the joint at its outer aspect; the instrument is then forcibly thrust through the synovial membrane, the fibrous capsule, and the fascia, until the point of the forceps is felt under the skin; then an incision is next made through the skin, upon the end of the forceps, to allow it to protrude: the blades of the forceps are then opened, and a drainage-tube drawn into the joint. The ends of the wires he twists, and, in his early operations, left protruding through the wound; but, latterly, he has found it much better to cut the ends short and hammer the twist down on the bone and completely close the wound, except at the lower end, where he places a small drainage-tube. The silver wire in these cases has given no trouble.

Prof. Lister said it was very desirable that the lower surface of the patella should be left quite smooth, and the drill-hole should not perforate the cartilage; if it does, then the hole

should be chipped up so that the wire would come out on the broken surface. Mr. Lister said also that he considered no man justified in performing this operation unless he could say with a clear conscience that he considered himself morally certain of avoiding the entrance of any septic mischief into the wound, and that if he could say so, he conceived that he was not only justified, but bound to give his patient the advantages derived from this method of treatment. In recent cases, Prof. Lister does not operate till the distinct inflammatory appearances that exist as the immediate result of the accident, pass off. In old cases, he always pares the fragments and removes any intervening fibrous tissue before wiring them together. The conclusion of the address is taken up with a few very timely and earnest remarks on antiseptic treatment of wounds: "As regards antiseptic treatment, I should like to make this remark, that now-a-days it is not a very complicated business, either in theory or practice. First as to theory: We do not require any scientific theory in order to believe in antiseptic treatment. You need not believe in the germ theory at all; if you are not convinced of the truth of the germ theory of putrefaction and of septic agencies generally, no matter whatsoever, with reference to antiseptic practice, all you have to believe is that there are such things as putrefaction and of septic agencies, that our wounds are liable to these, that they are very pernicious, that these things come from without, and that we have the means of preventing them by various chemical agencies. And then as to practice. It is not a very difficult thing to wash your hands in a carbolic solution, and have your instruments in this carbolic solution for a quarter of an hour before you operate. It is not very difficult to wrap round the limb a suitable envelope of antiseptic material. What I believe to be one of the most important things of all, is strictly to maintain this rule inviolate, which I insist upon with my dressers, and which, I confess, I have insisted upon more of late years than I used, and that is, always when we change a dressiny invariably first to cover the wound with something pure, -not to wash the surrounding parts with antiseptic solution, and then, after this has been

done, put a dressing on the wound, but dress the wound first and wash the surrounding parts afterwards. . . The edges of the wound are septic; the wound, if it is as it ought to be, is aseptic."

At the adjourned meeting of the Medical Society held Nev. 5th, Prof Lister's paper was discussed. The majority of the surgeons who took part in the discussion, including Bryant, Morris, S. Jones, Gant and M. Baker, held that with all caution ankylosis resulted sometimes from this mode of treatment, that if this occurred in the hands of the most careful and skilled surgeons, what would be the result if this operation were performed by men not trained in the many proceedings necessary to practice antiseptic surgery and without the necessary surgical experience. For the present, therefore, they argued that the simpler and less hazardous measures were the best in the majority of cases, and only when these measures failed were the new rigorous measures of Prof. Lister justifiable. Prof. Lister in his reply said it gave him great satisfaction to learn how universally the antiseptic principle had been recognized so long as the grand principle of antisepticism remained it mattered not what the antiseptic used was. After replying to the objections raised by the various surgeons, he concluded by saying that he had brought the cases of suture of the patella before the Society principally with the object of illustrating what could be done by antiseptic surgery, more than to advocate its employment under all circumstances.

At a meeting of the Clinical Society of London, held Nov. 9th, Mr. Turner read particulars of a case of Ununited Fracture of the Patella treated by suture of the fragments, with strict Listerian precautions. Mr. Turner's case recovered with an ankylosed joint after a long period of suppuration. Mr. Turner also gave a summary of fifty cases treated by various surgeons with a fatal result in two instances, whilst suppuration and ankylosis of the joint frequently supervened. Mr. Lister, who was at the meeting, said that no surgeon should perform so serious an operation unless either prepared himself to dress the patient's wound as required or convinced of the ability of

the assistant in charge to do so. He was convinced that, bye and bye, fracture of the patella would be generally treated on the plan he described, in order to secure a perfect joint, without risk, under antiseptic precautions.

Mr. Holmes insisted that the operation could only be justified

in seme old cases, and not in new ones.

Mr. Heath thought that Mr. Lister's paper before the Medical Society might cause the loss of many knees if not of many lives, because it would stimulate country surgeons to repeat his operation under circumstances which rendered antiseptic treatment impossible. In recent cases, Mr. Heath insisted that the operation was both unnecessary and unjustifiable. (Mr. Heath's new method of treating recent fractures of the patella by aspiration is noticed in the *Retrospect* of June, 1882.)

Mr. Bryant read notes of thirty-two cases of fracture of the patella treated in the ordinary manner and collected at random from the Guy's Hospital register by Mr. Poland. The table showed that injured limbs treated in this way after intervals of 15 or 20 years remained perfectly useful as a result of treatment. With such an experience, he thought the risk to life incurred by Mr. Lister's operation could not be justified.

The general opinion then among English surgeons seems to be that the operation is not suitable in recent fractures, and that though Mr. Lister may be very successful, it does not seem that his most ardent disciples are capable of the same success. The operation is only justifiable in cases of old ununited fracture causing a useless limb and then should only be performed with the strictest antiseptic precautions.

Mr. John Wood, of King's College, has lately (Lancet, Nov. 17th, 1883,) had a death from septicæmia following the operation for non-union of fractured patella by the Listerian method. Now, when such a careful and skilled surgeon and so able an anatomist as Mr. John Wood has a failure with Listerism, what will happen to surgeons of ordinary ability and much less experience. It seems to me that this case is sufficient to condemn the operation, in recent cases, at all events. Mr. Wood

found that he could not closely approximate the fragments, and if union had taken place it would have been fibrous. The wound was never at any time feetid.

Dr. McEwan of Glasgow, in the same number of the Lancet, reports several successful cases of this method of treating fractured patella, he insists on operating early in every recent case. Fracture of the patella is much rarer here than in England. Why, I am unable to say. In the Montreal General Hospital only some two or three cases have been treated in the last 7 or 8 years.

Prof. Cooper of San Francisco, more than 20 years ago, successfully treated fracture of the patella by wiring the fragments together, and this was done before antisepticism was thought of. He always allowed the wound to heal by granulation.

Lateral Closure of Wounds of Veins.—Dr. Pilcher, in the Angust number of the Annals of Anat. and Surgery, has a very interesting paper on Lateral Closure of Wounds of Veins. He has made a number of experiments on the deligation of veins with aseptic catgut ligatures. When lateral ligature was performed, in only one case did a thrombus form. There is, as a rule, union by first intention, and this preserves intact the function of the vessel. Dr. Pilcher recommends this method of ligature for wounds of veins whenever the antiseptic ligature (catgut) can be used and the wound treated antiseptically; otherwise he advises a double ligature of vein and division between.

I lately, in operating on the neck for a large tumor, wounded the internal jugular, and performed lateral ligature with complete success. There was no secondary hemorrhage, and the case progressed favorably to the end. Still, in wounds of veins of ordinary size—as, for instance, the external jugular—I should be inclined to trust more to complete ligature, with division between, as no one can positively say that the wound will ever, with the greatest care, remain thoroughly aseptic.

Aphthous Vulvitis in Children.—Aphthous vulvitis is a well-characterized disease. It is peculiar to little girls from 3 to 5 years of age; it is rare in private practice, and is observed especially in hospitals. Measles is the principal cause of this

affection; it furnishes two-thirds of the cases. Prognosis is good since the introduction of iodoform. The parts should be sprinkled with iodoform powder, and kept apart with pledgets of lint. The internal administration of tonics is a useful adjuvant to the local treatment.—(Arséne Sazaim, Th. de Paris, July, 1883; quoted in October Journal of Cutaneous & Venereal Diseases.)

Dr. Eugene F. Cordell (Maryland Med. Journal, Sept. 1st, 1883) strong recommends the use of a solution of carbolic acid as a local anæsthetic in minor surgery. He recommends, before opening an abscess, whitlow, cutting a tendon, or performing other minor operations, that the part be bathed for a few minutes in a five per cent. solution of carbolic acid. This, in some cases, deprives the part entirely of feeling, so that the patient does not feel the knife, and in other other cases considerably lessens the pain.

Alopecia prematura.—O. Lassar has continued his observations on the nature of premature baldness, and has further convinced himself of the communicability of at least the form associated with dandruff. . . . . . He considers the disease is spread by hair-dressers, who apply combs and brushes to their customers, one after another, without any regular cleansing of these articles after each time they are used. . . . . Females, he thinks, are less often affected with this form of baldness, because the hair-dresser more frequently attends to them at their own homes, and uses their combs and brushes. In order to prevent, as far as possible, the commencement of alopecia prematura, the hair should be cut and dressed at home with one's own implements, and these thoroughly clean. The following treatment of this form of baldness is recommended: The scalp is to be daily well soaked with tar or fluid glycerine potash soap, which is to be rubbed in firmly for 15 minutes. The head is to be drenched first with warm water, and then gradually colder water; a 2 per cent. corrosive sublimate lotion is afterwards freely applied. The head is then to be dried, and the roots of the hair are to have one-half per cent. of napthol in spirit rubbed into them. Finally, a pomade of 11/2 to 2 per cent. of carbolic or salicylic oil is to be used on the head. This treatment

has now, in many cases, brought the disease not only to a stand, but the hair has been to a considerable extent restored. (Berlin. Klin. Woch., No. 16, 1883, quoted in Edinburgh Medical Journal, Sept., 1883.)

In ordinary dandruff, I have found useful the washing of the head with common or soft soap every other day, and, after drying the head, applying an ointment of equal parts of cleate of

mercury (Shoemaker's) and prepared lard,

Carbolized Sawdust as a Dressing.—Mr. H. P. Symonds (Lancet, September 22nd, 1883,) recommends the use of coarse sawdust soaked in (1 to 10) solution of absolute phenol and spirit of wine, then allowed to dry that the spirit may evaporate, leaving sawdust charged with carbolic acid. When used it is enclosed in a bag made of several layers of gauze, and applied outside the deep dressing, the usual external dressing being placed over it. The sawdust takes the place of the usual padding of loose gauze which is generally used. Its absorbent powers are very great, and it has the additional advantages of keeping up an even pressure on the divided tissues. Mr. Symonds finds that 14 oz. of sawdust will readily absorb about a pint of fluid. Wood shavings have been used extensively in Germany in the same way with good results.

Sugar as a Dressing for Wounds.—It appears that now there are very few substances that are not used in dressing wounds. Every week something new is used and praised highly for its antiseptic qualities and its cheapness. Bismuth, glycerine, earth, wood shavings, and now we have sugar. Dr. F. Fischer, assistant to Prof. Lücke, in Strasburg Hospital, has used powdered cane sugar extensively as an antiseptic dressing to wounds. In cases of wounds united by sutures, the sugar mixed with iodoform and naphthalin, is put up in gauze and applied to the part. When the skin is lost it is put directly to the part, The sugar dressing may remain on from 8 to 14 days without the sugar dissolving.

Dr. Windelschmidt, of Cologne, says he has used sugar alone as a dressing with good results and considers it quite as good as iodoform for small wounds. He also says that powdered sugar is a very old popular remedy for fungous granulations, ichorous eczema and erysipelas of the face. Dr. W. has of late discarded the use of sugar in healing wounds, partly because when the patients found out the nature of the powder they ceased to have faith in it, and partly because when they had they treated themselves and so passed from observation. Sugar is aseptic if not antiseptic, and is as good as glycerine when used as a perservative by injecting it into the arteries of the dead animal we wish to keep from decomposing, but it is generally when used for this purpose combined with arsenic and nitrate of potash.